PyMotivator

Introduction

This is a Python program that intends to send motivational quotes on WhatsApp on a daily basis. These quotes are motivational by default but can be changed to funny, sports related, etc if required.

Purpose

This project has a purpose to learn Python from basics to advanced and at the same time add value by sending/receiving motivational quotes everyday.

Intended Audience

Anyone who wants to learn Python and its integration with WhatsApp or anyone who wants daily Motivational quotes on WhatsApp.

Overall Description

This project will have two main modules, one would fetch a quote from a [Quote of the Day API](https://quotes.rest/)

and send a WhatsApp text using a Third Party Service. The other module will be a cron scheduler that will schedule these WhatsApp texts for everyday.

System Features and Requirements

Functional Requirements

* Python 3.10-dev / 3.8 (For heroku Deployment)
* Requests
* Twilio
* APIScheduler

External Interface Requirements

* [Quotes of the Day API](https://quotes.rest/)
* [Twilio Dashboard for WhatsApp](https://www.twilio.com/console/sms/whatsapp/learn)
* [Visual Studio Code](https://code.visualstudio.com/)
* [GitHub](https://github.com/)
* [Heroku](https://dashboard.heroku.com/)

System Features

* get\_quote\_of \_the\_day

- takes category as parameter and returns the quote of the day

      -    set\_twilio\_connection

- takes account\_sid and account\_token as parameter and returns client object

      - send\_whatsapp\_text

       - takes quote and twilio client connection as parameters and returns message ID

* background\_cron\_job

- takes send\_whatsapp\_text as a job to execute everyday in background

Assumptions and Dependencies

* As the service for sending and receiving Quotes depends on Third party applications, it is assumed that they are always Up and Running.
* The Project initially aims for learning Python by its latest version i.e 3.10-dev but this version is not available for Heroku hence we would need to downgrade the python version to 3.8 for supporting heroku deployment.

Other Non Functional Requirements

* Security - All the keys and passwords to be stored as Environment variables
* Quality - Code quality and PEP8 Standards
* Performance - Deployment on Heroku for scaling, newer Python version with updated Libraries

## Industry Practices

* Clean, modularised code
* Snake case as per PEP 8
* Config is Seperate
* Proper Documentation
* DRY - Don’t Repeat yourself